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response, second line therapy. A one-year time horizon was used to capture all relevant outcomes. Excellent cosmetic outcome was defined as 100% complete lesion response, with no scarring, atrophy or induration, and no or slight occurrence of redness or change in pigmentation compared to adjacent skin. Clinical data from the trials were subjected to stochastic sensitivity analysis. **RESULTS:** From the deterministic model, 69% of nodular BCC patients had an excellent cosmetic outcome with MAL-PDT at a cost of £988.47 per patient compared to 36% of patients treated by excision (£772.91 per patient). Substituting the superficial BCC efficacy data, the cost of MAL-PDT was found to be £890.35 with a 75% excellent cosmetic outcome. In the stochastic analysis using 1000 simulations, 95% of the ICERs calculated were in the range £17 to £2816. **CONCLUSIONS:** MAL-PDT is advantageous for cosmetically sensitive areas such as lesions on the face and has comparable costs.

PCN11

COST-EFFECTIVENESS ANALYSIS OF DOSE-DENSE CHEMOTHERAPY WITH FILGRASTIM AS POSTOPERATIVE ADJUVANT TREATMENT OF BREAST CANCER

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OBJECTIVES: Although higher density chemotherapy regimens could improve treatment outcomes, febrile neutropenia and its related complications often limit the density of chemotherapy administration to a suboptimal level. Filgrastim-enabled chemotherapy regimens administered at a high density were shown to increase survival among breast cancer patients in a recent clinical trial (Citron et al, 2003). The high costs of filgrastim and time loss of patients and caregivers due to frequent administration, motivated an economic analysis to compare the cost-effectiveness of dose-dense therapy with filgrastim vs. conventional chemotherapy in breast cancer patients. **METHODS:** Target Population: Women with node-positive breast cancer. Time Horizon: Twelve cycles of chemotherapy with lifetime follow up. Perspective: Societal. Data Sources: The Intergroup Trial C9741 was the primary source of treatment efficacy, rates of febrile neutropenia with and without hospitalization, and other major toxicities. Direct health care cost components and indirect costs of patient and caregiver time loss were obtained from literature review. Measurements: Discounted lifetime costs were estimated based on a decision model. Discounted quality-adjusted life years (QALYs) was estimated based on the DEALE method. Incremental cost-effectiveness ratios (ICERs) were calculated for each age group at 5-year interval. **RESULTS:** Under the base case assumptions, dose-dense chemotherapy incurred cost \$25,530 higher than conventional therapy over lifetime, and the average discounted survival benefits were 1.400 QALYs per patient. This resulted in an average cost-effectiveness ratio of \$19,940 per QALY saved. ICERs were \$13,672/QALY in age group 30–34, and this ratio increased with age to \$34,418/QALY in age group 75–80, indicating a more favorable cost-effectiveness in younger women. Results of the model were relatively stable when the parameters changed within a reasonable range. **CONCLUSIONS:** From a societal perspective, dose-dense chemotherapy with filgrastim in breast cancer patients is a cost-effective improvement compared to conventional chemotherapy.

PCN12

ECONOMIC BURDEN OF PANCREATIC CANCER AND TREATMENT FAILURE

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OBJECTIVES: This study estimated the costs of treating pancreatic cancer and evaluated the additional costs when initial treatment failed and secondary treatment or terminal care were needed. **METHODS:** This claims-based retrospective study used the MarketScan Commercial and Medicare databases. The study included patients first diagnosed with pancreatic cancer (ICD-9-CM 157.xx) between January 1, 1999 and November 30, 2000. A demographically-matched control group was selected at a ratio of 3:1. Non-terminal treatment provided to cancer patients upon diagnosis was categorized as initial treatment. Chemotherapy switches or additional treatment occurring three months after the end of initial treatment were noted as secondary treatment following treatment failure. Care provided after the onset of advanced disease, during the 12 months prior to death, or in hospices or nursing facilities was defined as terminal treatment. Monthly mean costs were adjusted for age, gender, Charlson Comorbidity Index, region, follow-up length and hospital mortality using ordinary least square regression. **RESULTS:** The study included 412 cancer patients and 1236 matched controls. Mean follow-up was 7.5 months. Adjusted mean monthly health care costs were \$7613 for cancer patients and \$334 for controls ($p < 0.05$). Inpatient care accounted for the majority of costs among cancer patients. Approximately half (51.7%) of the eligible patients did not respond to initial treatment, and these patients incurred \$15,000 more per month than patients who required no additional treatment. The costs of additional treatment and higher initial treatment costs contributed to the cost burden of treatment failure. **CONCLUSIONS:** The direct costs of pancreatic cancer are substantial, and these costs are especially pronounced when initial treatment fails. The causes of treatment failure, and the interventions that may prevent or delay these occurrences, should be investigated further.

PCN13

AN ECONOMIC ANALYSIS OF RADIATION VERSUS RADIATION PLUS GOSERELIN IN THE TREATMENT OF LOCALLY ADVANCED PROSTATE CANCER

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OBJECTIVE: Clinical trial data has proven hormonal therapy increases survival time when added to a radiation treatment strategy for locally advanced prostate cancer. The purpose of this analysis was to assess from the payers' perspective the cost effectiveness of adding hormonal therapy to radiation therapy when treating patients with locally advanced prostate cancer. **METHODS:** A decision tree model incorporating a Markov process was developed using DATA 4.0 to determine the cost associated with a locally advanced prostate cancer patient gaining an additional year of life as a result of adding goserelin, a gonadotropin-releasing hormone agonist analogue, to a radiation treatment strategy. Data on the effectiveness of each strategy was obtained from published clinical trials. Costs were based on the literature and data from the US Centers for Medicaid and Medicare Services and the UK Department of Health. All costs and benefits were discounted at five percent. Conventional and probabilistic sensitivity analyses were used to assess model robustness. **RESULTS:** Over a 9-year period, expected costs of treatment with radiation alone and with radiation plus goserelin are \$7582 and \$25,299, respectively, leading to an incremental cost of \$17,718 to add hormonal therapy to a radiation only treatment strategy. In terms of effectiveness, over a nine-year period, patients treated with hormonal therapy in addition to radiation therapy gain an average of 0.65 years of life. The incremental cost effectiveness of combination therapy over radiation alone is \$30,887 per additional life-year gained. Varying